

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193
(703) 583-3800 Fax (703) 583-3821
www.deq.virginia.gov

David K. Paylor Director

Thomas A. Faha Regional Director

1 June 2009

Ms. Maureen O'Shaughnessy Director of Clean Rivers City of Alexandria, Virginia Sanitation Authority 1500 Eisenhower Avenue P.O. Box 1987 Alexandria, VA 22313-1987

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Re:

Preston Bryant

Secretary of Natural Resources

Reissuance of VPDES Permit No. VA0025160

Alexandria Advanced Wastewater Treatment Plant, City of Alexandria

Dear Mr. O'Shaughnessy:

The Department of Environmental Quality (DEQ) has approved the enclosed effluent limitations and monitoring requirements for the above-referenced permit. A copy of your permit and the Discharge Monitoring Report (DMR) form is included. Please make additional copies of the DMR for future use. The first DMR for the month of July is due by 10 August 2009. Please send DMRs to:

Virginia Department of Environmental Quality Northern Regional Office 13901 Crown Court Woodbridge, VA 22193-1453

Please reference the effluent limits in your permit and report monitoring results on the DMRs to the same number of significant digits as are included in the permit limits for the parameter.

Note that DEQ has launched an e-DMR program that allows you to submit the effluent data electronically. If you are interested in participating in this program, please visit the following website for details: http://www.deq.virginia.gov/water/edmrfaq.html.

Please note that compliance with the permit's requirements for use and disposal of sewage sludge do not relieve you of your responsibility to comply with federal requirements set forth in 40 CFR Part 503. Until DEQ seeks and is granted authority to administer the Part 503 regulations by EPA, treatment works treating domestic sewage should continue to work directly with EPA to comply with them.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty days from the date of service (the date you actually received this decision or the date it was mailed to you, whichever occurred first) within which to appeal this decision by filing a notice of appeal in accordance with the Rules of the Supreme Court of Virginia with the Director, Department of Environmental Quality. In the event that this decision is served on you by mail, three days are added to that period.

Alternately, any owner under §§ 62.1-44.16, 62.1-44.17, and 62.1-44.19 of the State Water Control Law aggrieved by any action of the State Water Control Board taken without a formal hearing, or by inaction of the Board, may demand in writing a formal hearing of such owner's grievance, provided a petition requesting such hearing is filed with the Board. Said petition must meet the requirements set forth in §1.23(b) of the Board's Procedural Rule No. 1. In cases involving actions of the Board, such petition must be filed within thirty days after notice of such action is mailed to such owner by certified mail.

A Reliability Class I is assigned to this facility and this facility has Class I licensed operator requirements.

If you have questions about the permit, please contact Douglas Frasier at (703) 583-3873, or by email at douglas.frasier@deq.virginia.gov.

Sincerely,

Bryant Thomas

Water Permits Manager

Enc.: Permit No. VA0025160

cc: DEQ-Water, OWPP

EPA-Region III, 3WP12

Department of Health, Culpeper Water Compliance, NRO

COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

Alexandria ASA Advanced Wastewater Treatment Plant

ADDRESS 1500 Eisenhower Ave

NAME

Alexandria

VA 22314

FACILITY 1500 Eisenhower Ave

PERMIT NUMBER	DISCHARGE NUMBER
VA0025160	001

Municipal Major

05/26/2009

DEPT. OF ENVIRONMENTAL QUALITY (REGIONAL OFFICE)

Northern Regional Office 13901 Crown Court

Woodbridge

VA 22193

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

PARAMETER		QUANTI	TY OR LOADING			QUALITY OR CO	NCENTRATION		NO. EX.	FREQUENCY OF	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX.	ANALYSIS	' ' ' '
001 FLOW	REPORTD				******	******	******				
	REQRMNT	54	NL	MGD	******	*****	******		-	CONT	REC
002 PH	REPORTD	*****	*****			******					
	REQRMNT	****	*****		6.0	*****	9.0	SU	0	1/DAY	GRAB
004 TSS	REPORTD		İ		******						
	REQRMNT	1200	1800	KG/D	*****	6.0	9.0	MG/L	0	1/DAY	24HC
007 DO	REPORTD	*****	*****			******	******				
-	REQRMNT	****	*****		6.0	******	*****	MG/L	0	1/DAY	GRAB
012 PHOSPHORUS, TOTAL (AS	REPORTD				******						
P)	REQRMNT	81	120	LBS/D	******	0.18	0.27	MG/L	0	1/DAY	24HC
013 NITROGEN, TOTAL (AS	REPORTD	*****	*****		******		******				
N)	REQRMNT	****	*****		******	NL	*****	MG/L	0	3D/W	CALC
068 TKN (N-KJEL)	REPORTD	*****	*****		******						
	REQRMNT	*****	*****		*****	NL	NL	MG/L	0	3D/W	24HC
120 E.COLI	REPORTD	*****	*****		******		*****				
	REQRMNT	******	******		******	126	*****	N/CML	0	1/DAY	GRAB

FROM

BYPASSES AND	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)	OPERATOR IN R	ESPONSIBLE CHARGE		DAT		
OVERFLOWS									
		THIS DOCUMENT AND ALL RVISION IN ACCORDANCE		TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
SUBMITTED. BASE	D ON MY INQUIRY OF T	HE PERSON OR PERSONS W	ALUATE THE INFORMATION HO MANAGE THE SYSTEM OR RMATION, THE INFORMATION	PRINCIPAL EXECUTIVE OFFICE	R OR AUTHORIZED AGENT	TELEPHONE			
SUBMITTED IS TO	THE BEST OF MY KNOW	LEDGE AND BELIEF TRUE,	ACCURATE AND COMPLETE. TTING FALSE INFORMATION,						
			OWING VIOLATIONS. SEE 18 e statutes may include	TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY
fines up to \$10	,000 and/or maximum	imprisonment of betwee	n 6 months and 5 years.)						

COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

Alexandria ASA Advanced Wastewater Treatment Plant

ADDRESS 1500 Eisenhower Ave

NAME

Alexandria

VA 22314

FACILITY 1500 Eisenhower Ave

VA0025160 001
PERMIT NUMBER DISCHARGE NUMBER

| MONITORING PERIOD | | YEAR | MO | DAY | | TO | | DAY | |

Municipal Major

05/26/2009

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Northern Regional Office

13901 Crown Court

Woodbridge

VA 22193

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PARAMETER		QUANTI	TY OR LOADING			QUALITY OR CO	NCENTRATION		NO. EX.	FREQUENCY OF	SAMPLE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	[ANALYSIS	'
132 AMMONIA, AS N NOV-JAN	REPORTD	******	*****		*****		· · · · · · · · · · · · · · · · · · ·				
	REQRMNT	*****	*****		*****	8.4	10	MG/L	0	1/DAY	24HC
133 AMMONIA, AS N FEB-MAR	REPORTD	*****	*****		******						
	REQRMNT	*****	*****		*****	6.9	8.5	MG/L	0	1/DAY	24HC
159 CBOD5	REPORTD				*****						
· · · · · · · · · · · · · · · · · · ·	REQRMNT	1000	1600	KG/D	******	5	8	MG/L	0	1/DAY	24HC
89 NITRITE+NITRATE-	REPORTD	******	*****		*****		*****				
	REQRMNT	******	*****		*****	NL	*****	MG/L	0	3D/W	24HC
720 TUC - CHRONIC 3-BROOD	REPORTD	*****	*****		******	****					
STATRE CERIODAPHNIA DUBIA	REQRMNT	****	*****		*****	******	NL	TU-C		1/YR	24HC
721 TUC - CHRONIC 7-DAY	REPORTD	*****	*****		******	*****					
STATRE PIMEPHALES PROMELA	REQRMNT	*****	*****		*****	*****	NL	TU-C		1/YR	24HC
764 AMMONIA, AS N APR-OCT	REPORTD				******						
-	REQRMNT	200	900	KG/D	*****	1.0	4.4	MG/L	0	1/DAY	24HC
92 NITROGEN, TOTAL (AS	REPORTD	******	*****		******		******				
N) (CALENDAR YEAR)	REQRMNT	*****	*****		******	6.0	******	MG/L	0	1/YR	CALC

FROM

BYPASSES AND	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)	OPERATOR IN R	OPERATOR IN RESPONSIBLE CHARGE					
OVERFLOWS										
PREPARED UNDER	TIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE RED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESI- SURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMA- TTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYST		WITH A SYSTEM DESIGNED	TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY	
SUBMITTED, BASE	D ON MY INQUIRY OF T	HE PERSON OR PERSONS W		PRINCIPAL EXECUTIVE OFFICE	R OR AUTHORIZED AGENT	TELEPHONE				
			ACCURATE AND COMPLETE.							
U.S.C. & 1001 A	ND 33 U.S.C. & 1319.	(Penalties under thes	OWING VIOLATIONS. SEE 18	TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY	
fines up to \$10	,000 and/or maximum	imprisonment of betwee	n 6 months and 5 years.)							

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Alexandria ASA Advanced Wastewater Treatment Plant

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Alexandria

VA 22314

FACILITY 1500 Eisenhower Ave

VA0025160 001
PERMIT NUMBER DISCHARGE NUMBER

UMBER Woodbridge

Municipal Major

VA 22193

MONITORING PERIOD

FROM YEAR MO DAY TO DAY

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

DEPT. OF ENVIRONMENTAL QUALITY

Northern Regional Office

13901 Crown Court

(REGIONAL OFFICE)

05/26/2009

PARAMETER		QUANTI	TY OR LOADING			QUALITY OR CO	NCENTRATION		NO. EX.	FREQUENCY OF	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	□ □ △ .	ANALYSIS	' ' '
805 NITROGEN, TOTAL (AS	REPORTD	*****	******		******		*****				
N) (YEAR-TO-DATE)	REQRMNT	*****	*****		******	NL	*****	MG/L	0	1/M	CALC
	REPORTD									Ï	
	REQRMNT									*****	
	REPORTD										
	REQRMNT									*****	
	REPORTD										
	REQRMNT									*****	
	REPORTD										
	REQRMNT									*****	
	REPORTD										
	REQRMNT									*****	
	REPORTD			,							
-	REQRMNT									*****	
	REPORTD		Ī								
	REQRMNT									*****	

BYPASSES AND	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)	OPERATOR IN R	ESPONSIBLE CHARGE		DAT	Έ	
OVERFLOWS									
PREPARED UNDER	MY DIRECTION OR SUPE		ATTACHMENTS WERE WITH A SYSTEM DESIGNED ALUATE THE INFORMATION	TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
SUBMITTED. BASE	D ON MY INQUIRY OF THE	HE PERSON OR PERSONS W	HO MANAGE THE SYSTEM OR RMATION, THE INFORMATION	PRINCIPAL EXECUTIVE OFFICE	R OR AUTHORIZED AGENT	TELEPHONE			
		•	ACCURATE AND COMPLETE. TTING FALSE INFORMATION,						
U.S.C. & 1001 A	ND 33 U.S.C. & 1319.	(Penalties under thes	OWING VIOLATIONS. SEE 18 e statutes may include	TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY
fines up to \$10	,000 and/or maximum :	imprisonment of betwee	n 6 months and 5 years.)						

COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES)
DISCHARGE MONITORING REPORT(DMR)

Alexandria ASA Advanced Wastewater Treatment Plant

ADDRESS 1500 Eisenhower Ave

NAME

Alexandria

VA 22314

FACILITY 1500 Eisenhower Ave

VA0025160	002
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD

YEAR MO DAY YEAR MO DAY

TO DAY

Municipal Major

05/26/2009

DEPT. OF ENVIRONMENTAL QUALITY
(REGIONAL OFFICE)

Northern Regional Office 13901 Crown Court

Woodbridge

VA 22193

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PARAMETER		QUANTI	TY OR LOADING			QUALITY OR CO	NCENTRATION		NO.	0	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX.	ANALYSIS	TIPE
001 FLOW	REPORTD				******	*****	*****				
	REQRMNT	54	NL	MGD	*****	*****	*****		-	CONT	REC
002 PH	REPORTD	*****	*****			*****			İ		
	REQRMNT	*****	******		6.0	******	9.0	SU	0	1/DAY	GRAB
004 TSS	REPORTD				******						
1	REQRMNT	1200	1800	KG/D	*****	6.0	9.0	MG/L	0	1/DAY	24HC
-	REPORTD	*****	*****			******	*****				
	REQRMNT	******	*****		6.0	*****	*****	MG/L	0	1/DAY	GRAB
012 PHOSPHORUS, TOTAL (AS	REPORTD				******						
P)	REQRMNT	81	120	LBS/D	*****	0.18	0.27	MG/L	0	1/DAY	24HC
013 NITROGEN, TOTAL (AS	REPORTD	*****	*****		******		******				
N)	REQRMNT	****	*****		******	NL	*****	MG/L	0	3D/W	CALC
068 TKN (N-KJEL)	REPORTD	*****	******		******						
	REQRMNT	*****	*****		*****	NL	NL	MG/L	0	3D/W	24HC
120 E.COLI	REPORTD	*****	*****		******		******				
	REQRMNT	******	*****		*****	126	*****	N/CML	0	1/DAY	GRAB

FROM

BYPASSES AND	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL FLOW(M.G.)	TOTAL FLOW(M.G.)	TOTAL FLOW(M.G.)	TOTAL FLOW(M.G.)	TOTAL FLOW(M.G.)	TOTAL FLOW(M.G.)	TOTAL FLOW(M.G.)	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)	OPERATOR IN R	ESPONSIBLE CHARGE		DAT	Έ	
OVERFLOWS																	
I CERTIFY UNDER	PENALTY OF LAW THAT	ENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGN ALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM CETLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION EB BEST OF MY KNOWLEDGE AND BELIEF TRUE, ACCURATE AND COMPLE HERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING PALSE INFORMATIONS. SETTING TO SUBMITTING PALSE INFORMATIONS.	ATTACHMENTS WERE				+										
PREPARED UNDER	MY DIRECTION OR SUPE	RVISION IN ACCORDANCE	WITH A SYSTEM DESIGNED	TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY								
TO ASSURE THAT	QUALIFIED PERSONNEL	PROPERLY GATHER AND EV	ALUATE THE INFORMATION				+	<u> </u>									
SUBMITTED. BASE	D ON MY INQUIRY OF T	HE PERSON OR PERSONS W	HO MANAGE THE SYSTEM OR	PRINCIPAL EXECUTIVE OFFICE	R OR AUTHORIZED AGENT	TELEPHONE	l										
THOSE PERSONS D	IRECTLY RESPONSIBLE	FOR GATHERING THE INFO	RMATION, THE INFORMATION														
SUBMITTED IS TO	THE BEST OF MY KNOW	LEDGE AND BELIEF TRUE,	ACCURATE AND COMPLETE.					1									
I AM AWARE THAT	THERE ARE SIGNIFICA	NT PENALTIES FOR SUBMI	TTING FALSE INFORMATION,	li													
INCLUDING THE P	OSSIBILITY OF FINE A	ND IMPRISONMENT FOR KN	OWING VIOLATIONS. SEE 18	TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY								
U.S.C. & 1001 A	ND 33 U.S.C. & 1319.	(Penalties under thes	e statutes may include	TIPLD ON FRINTED NAME	SIGNATURE		, LAN	1410.	DAI								
fines up to \$10	,000 and/or maximum	imprisonment of betwee	n 6 months and 5 years.)														
				1			<u> </u>	<u> </u>									

COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES) DISCHARGE MONITORING REPORT(DMR)

Alexandria ASA Advanced Wastewater Treatment Plant

ADDRESS 1500 Eisenhower Ave

NAME

Alexandria

VA 22314

FACILITY 1500 Eisenhower Ave

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YEAR YEAR МО DAY МО DAY то

Municipal Major

05/26/2009

DEPT. OF ENVIRONMENTAL QUALITY (REGIONAL OFFICE)

Northern Regional Office 13901 Crown Court

Woodbridge

VA 22193

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PARAMETER		QUANT	ITY OR LOADING			QUALITY OR CO	NCENTRATION		NO.	FREQUENCY OF	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX.	ANALYSIS	ITPE
132 AMMONIA, AS N NOV-JAN	REPORTD	*****	*****		*****						
	REQRMNT	*****	*****		*****	8.4	10	MG/L	0	1/DAY	24HC
133 AMMONIA, AS N FEB-MAR	REPORTD	*****	*****		******						
	REQRMNT	******	*****		*****	6.9	8.5	MG/L	0	1/DAY	24HC
159 CBOD5	REPORTD			<u> </u>	******						
	REQRMNT	1000	1600		******	5	8	MG/L	0	1/DAY	24HC
_	REPORTD	*****	*****		******						
	REQRMNT	******	*****		*****	0.009	0.011	MG/L	0	1/DAY	GRAB
389 NITRITE+NITRATE-	REPORTD	*****	*****		******		*****				
N, TOTAL	REQRMNT	******	*****		******	NL	*****	MG/L	0	3D/W	24HC
720 TUC ~ CHRONIC 3-BROOD	REPORTD	******	*****		******	******					
STATRE CERIODAPHNIA DUBIA	REQRMNT	******	*****		*****	*****	NĻ	TU-C		1/YR	24HC
721 TUC - CHRONIC 7-DAY	REPORTD	******	*****		******	******					
TATER DIMEDHALES BROMELA	REQRMNT	*****	******		******	******	NL	TU-C		1/YR	24HC
764 AMMONIA, AS N APR-OCT	REPORTD				******						
	REQRMNT	200	900		******	1.0	4.4	MG/L	0	1/DAY	24HC

FROM

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS

BYPASSES AND	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)	OPERATOR IN R		DAT	DATE		
OVERFLOWS									
PREPARED UNDER	MY DIRECTION OR SUPE		WITH A SYSTEM DESIGNED	TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
SUBMITTED. BASE	D ON MY INQUIRY OF T	HE PERSON OR PERSONS W	ALUATE THE INFORMATION THO MANAGE THE SYSTEM OR THATION, THE INFORMATION	PRINCIPAL EXECUTIVE OFFICE	R OR AUTHORIZED AGENT	TELEPHONE			
			ACCURATE AND COMPLETE. TTING FALSE INFORMATION,						
U.S.C. & 1001 A	ND 33 U.S.C. & 1319.	(Penalties under thes	OWING VIOLATIONS. SEE 18 e statutes may include	TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY
rines up to \$10	,000 and/or maximum	imprisonment of betwee	n 6 months and 5 years.)						

COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES) DISCHARGE MONITORING REPORT(DMR)

Alexandria ASA Advanced Wastewater Treatment Plant

ADDRESS 1500 Eisenhower Ave

NAME

Alexandria

VA 22314

TOTAL FLOW(M.G.) TOTAL BODS(K.G.)

FACILITY 1500 Eisenhower Ave

VA0	02516	50		002				
PERMI	T NUM	BER		DISCHAR	GE NU	MBER		
	MONITORING PERIOD							
YEAR	мо	DAY		YEAR	МО	DAY		

Municipal Major

05/26/2009

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		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX.	ANALYSIS	TYPE
792 NITROGEN, TOTAL (AS	REPORTD	******	*****		******		******				
N) (CALENDAR YEAR)	REQRMNT	*****	****		*****	6.0	*****	MG/L	0	1/YR	CALC
BOS NITROGEN, TOTAL (AS	REPORTD	*****	*****		******		******				
(YEAR-TO-DATE)	REQRMNT	******	*****		*****	NL	*****	MG/L	0	1/M	CALC
_	REPORTD										
	REQRMNT						· · · · · · · · · · · · · · · · · · ·			*****	
	REPORTD										
	REQRMNT									*****	
	REPORTD										
	REQRMNT									*****	
	REPORTD										
	REQRMNT							<u> </u>		*****	
	REPORTD										
	REQRMNT									*****	
	REPORTD										
	REQRMNT									*****	

FROM

ADDITIONAL PERMIT REQUIREMENTS OR COMMENTS

BYPASSES

TOTAL

AND	OCCURRENCES	1017/212014(M:0.)	TOTAL BODS(K.G.)	of Engrottin to			-		
OVERFLOWS									
PREPARED UNDER	MY DIRECTION OR SUPE		ATTACHMENTS WERE WITH A SYSTEM DESIGNED VALUATE THE INFORMATION	TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
SUBMITTED. BASE	D ON MY INQUIRY OF T	HE PERSON OR PERSONS W	WHO MANAGE THE SYSTEM OR DRMATION, THE INFORMATION	I WIND HE EXECUTIVE OF FICE	R OR AUTHORIZED AGENT	TELEPHONE			
		•	ACCURATE AND COMPLETE.						
U.S.C. & 1001 A	ND 33 U.S.C. & 1319.	(Penalties under thes	JOWING VIOLATIONS. SEE 18 se statutes may include	TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY
fines up to \$10	,000 and/or maximum	imprisonment of betwee	en 6 months and 5 years.)				<u> </u>	1	

OPERATOR IN RESPONSIBLE CHARGE

COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES) DISCHARGE MONITORING REPORT(DMR)

Alexandria ASA Advanced Wastewater Treatment Plant

ADDRESS 1500 Eisenhower Ave

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VA 22314

FACILITY 1500 Eisenhower Ave

VA0025160	SO1
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD МО DAY YEAR | MO DAY TO

Municipal Major

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		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX.	ANALYSIS	TYPE
672 SOLIDS, TOTAL, SLUDGE	REPORTD	*****	*****		******						1
AS PERCENT	REQRMNT	******	*****		******	NL	NA	MG/KG		1/YR	COMP
680 ARSENIC, SLUDGE	REPORTD	*****	******		******						
	REQRMNT	****	*****		*****	41	75	MG/KG		1/YR	COMP
681 MOLYBDENUM, SLUDGE	REPORTD	*****	*****		******				Ī		
	REQRMNT	*****	*****		******	NA	75	MG/KG		1/YR	COMP
682 ZINC, SLUDGE	REPORTD	*****	*****		******						
	REQRMNT	****	*****		*****	2800	7500	MG/KG		1/YR	COMP
683 LEAD, SLUDGE	REPORTD	*****	******		******						
	REQRMNT	*****	*****		******	300	840	MG/KG		1/YR	COMP
684 NICKEL, SLUDGE	REPORTD	******	******		******						
	REQRMNT	*****	*****		*****	420	420	MG/KG		1/YR	COMP
685 MERCURY, SLUDGE	REPORTD	******	******		******						
-	REQRMNT	*****	*****		*****	17	57	MG/KG		1/YR	COMP
	REPORTD	******	*****		*****						
	REQRMNT	****	*****		*****	1500	4300	MG/KG		1/YR	COMP

YEAR

FROM

BYPASSES AND	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)	OPERATOR IN R	OPERATOR IN RESPONSIBLE CHARGE				
OVERFLOWS									
I CERTIFY UNDER	PENALTY OF LAW THAT	THIS DOCUMENT AND ALL	ATTACHMENTS WERE				+		
		RVISION IN ACCORDANCE		TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
	-		ALUATE THE INFORMATION	DOMESTIC STREET	DOD AUTHORIZED AGENT		- 	-	
	·-		HO MANAGE THE SYSTEM OR RMATION, THE INFORMATION	PRINCIPAL EXECUTIVE OFFICE	R OR AUTHORIZED AGENT	TELEPHONE			
			ACCURATE AND COMPLETE.	1			 	T	I
			TTING FALSE INFORMATION,						,
			OWING VIOLATIONS. SEE 18		CIONATURE		VEAD	110	DAY
U.S.C. & 1001 A	ND 33 U.S.C. & 1319.	(Penalties under thes	e statutes may include	TYPED OR PRINTED NAME	SIGNATURE	1	YEAR	MO.	DAY
fines up to \$10	,000 and/or maximum	imprisonment of betwee	n 6 months and 5 years.)						

COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES) **DISCHARGE MONITORING REPORT(DMR)**

YEAR MO DAY

Alexandria ASA Advanced Wastewater Treatment Plant

ADDRESS 1500 Eisenhower Ave

NAME

Alexandria

VA 22314

LOCATION 1500 Eisenhower Ave

VA0025160 PERMIT NUMBER DISCHARGE NUMBER MONITORING PERIOD

05/26/2009

DEPT. OF ENVIRONMENTAL QUALITY (REGIONAL OFFICE)

Northern Regional Office 13901 Crown Court

Woodbridge

Municipal Major

VA 22193

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

FROM TO BEFO											ORM.
PARAMETER		QUANT	ITY OR LOADING			QUALITY OR CONCENTRATION				FREQUENCY OF	SAMPLE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX.	ANALYSIS	ITTE
687 CADMIUM, SLUDGE	REPORTD	******	*****		******						
	REQRMNT	******	*****		*****	39	85	MG/KG		1/YR	COMP
688 LEVEL OF PATHOGEN	REPORTD	*****	*****		******	******					
REQUIREMENTS ACHIEVED	REQRMNT	*****	*****		*****	*****	NL	STCL#		1/YR	*****
697 SELENIUM, SLUDGE	REPORTD	*****	*****		*****						
	REQRMNT	*****	******		*****	100	100	MG/KG		1/YR	COMP
	REPORTD		İ								
	REQRMNT									*****	
	REPORTD							İ	İ		
	REQRMNT									*****	
	REPORTD								 		İ
	REQRMNT									*****	
	REPORTD								İ	<u> </u>	<u>, </u>
	REQRMNT	<u> </u>								*****	
	REPORTD				·			Ì	i	1	
	REQRMNT							<u> </u>	 	*****	

YEAR

MO

DAY

BYPASSES AND	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)	OPERATOR IN R	DAT				
OVERFLOWS									
PREPARED UNDER	MY DIRECTION OR SUPE	THIS DOCUMENT AND ALL RVISION IN ACCORDANCE PROPERLY GATHER AND EV	WITH A SYSTEM DESIGNED	TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
	=		HO MANAGE THE SYSTEM OR RMATION, THE INFORMATION	PRINCIPAL EXECUTIVE OFFICE	R OR AUTHORIZED AGENT	TELEPHONE			
		•	ACCURATE AND COMPLETE.						
			OWING VIOLATIONS. SEE 18 e statutes may include	TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY
fines up to \$10	,000 and/or maximum	imprisonment of betwee	n 6 months and 5 years.)						

COMMONWEALTH OF VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM(NPDES) **DISCHARGE MONITORING REPORT(DMR)**

Alexandria ASA Advanced Wastewater Treatment Plant

ADDRESS 1500 Eisenhower Ave

NAME

Alexandria

VA 22314

LOCATION 1500 Eisenhower Ave

VA0025160	SP1
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD YEAR YEAR MO DAY МО то

Municipal Major

05/26/2009

DEPT. OF ENVIRONMENTAL QUALITY (REGIONAL OFFICE)

Northern Regional Office 13901 Crown Court

Woodbridge

VA 22193

NOTE: READ PERMIT AND GENERAL INSTRUCTIONS BEFORE COMPLETING THIS FORM.

PARAMETER		QUANT	ITY OR LOADING			QUALITY OR CO	NCENTRATION		NO.	FREQUENCY OF	SAMPLE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS	EX.	ANALYSIS	1175
691 ANNUAL AMT SLUDGE	REPORTD	*****			*****	*****	*****				
DISPOSED BY OTHER MTHD	REQRMNT	******	NL	MTNYR	*****	*****	*****			1/YR	CALC
692 ANNUAL AMT SLUDGE	REPORTD	*****			******	******	******				
INCINERATED	REQRMNT	******	NL	MTNYR	*****	*****	*****			1/YR	CALC
93 ANNUAL SLUDGE RODUCTION TOTAL	REPORTD	*****			******	******	*****				
	REQRMNT	*****	NL	MTNYR	*****	******	*****			1/YR	CALC
694 ANNUAL AMT SLUDGE	REPORTD	*****			******	******	******				
LAND APPLIED	REQRMNT	******	NL	MTNYR	******	*****	*****			1/YR	CALC
696 ANNUAL AMT SLUDGE	REPORTD	*****			******	******	******				
DISPOSED IN LANDFILL	REQRMNT	*****	NL	MTNYR	******	******	*****			1/YR	CALC
	REPORTD										
	REQRMNT									*****	
	REPORTD										
	REQRMNT									*****	
	REPORTD										
	REQRMNT									*****	

FROM

BYPASSES AND	TOTAL OCCURRENCES	TOTAL FLOW(M.G.)	TOTAL BOD5(K.G.)	OPERATOR IN R	OPERATOR IN RESPONSIBLE CHARGE				
OVERFLOWS									
PREPARED UNDER	MY DIRECTION OR SUPE		ATTACHMENTS WERE WITH A SYSTEM DESIGNED ALUATE THE INFORMATION	TYPED OR PRINTED NAME	SIGNATURE	CERTIFICATE NO.	YEAR	MO.	DAY
SUBMITTED. BASE	D ON MY INQUIRY OF T	HE PERSON OR PERSONS W	THO MANAGE THE SYSTEM OR	PRINCIPAL EXECUTIVE OFFICE	R OR AUTHORIZED AGENT	TELEPHONE			
			ACCURATE AND COMPLETE. TTING FALSE INFORMATION,						
U.S.C. & 1001 A	ND 33 U.S.C. & 1319.	(Penalties under thes	OWING VIOLATIONS. SEE 18	TYPED OR PRINTED NAME	SIGNATURE		YEAR	MO.	DAY
fines up to \$10	,000 and/or maximum	imprisonment of betwee	n 6 months and 5 years.)						

THIS REPORT IS REQUIRED BY LAW (33 U. S. C. § 1318 40 CFR 122.41(I)(4)(i)). FAILURE TO REPORT OR FAILURE TO REPORT TRUTHFULLY CAN RESULT IN CIVIL PENALTIES NOT TO EXCEED \$10,000 PER DAY OF VIOLATION: OR IN CRIMINAL PENALTIES NOT TO EXCEED \$25,000 PER DAY OF VIOLATION OR BY IMPRISONMENT FOR NOT MORE THAN FIVE YEARS. OR BOTH.

GENERAL INSTRUCTIONS

- Complete this form in permanent ink or indelible pencil.
- 2. Be sure to enter the dates for the first and last day of the period covered by the report on the form in the space marked "Monitoring Period".
- 3. For those parameters where the "permit requirement" spaces are blank or a limitation appears, provide data in the "reported" spaces in accordance with your permit.
- 4. Enter the average and, if appropriate, maximum quantities and units in the "reported" spaces in the columns marked "Quantity or Loading". KG/DAY = Concentration(mg/l) x Flow(MGD) x 3.785.
- 5. Enter maximum, minimum, and/or average concentrations and units in the "reported" spaces in the columns marked "Quality or Concentration".
- 6. Enter the number of samples which do not comply with the maximum and /or minimum permit requirements in the "reported" space in the column marked "No. Ex.".
- 7. Enter the actual frequency of analysis for each parameter (number of times per day, week, month) in the "reported" space in the column marked "Frequency of Analysis".
- 8. Enter the actual type of sample collected for each parameter in the "reported" space in the column marked "Sample Type".
- 9. Enter additional required data or comments in the space marked "additional permit requirements or comments".
- 10. Record the number of bypasses during the month, the total flow in million gallons and BOD5 in kilograms in the proper columns in the section marked "Bypasses and Overflows".
- 11. The operator in responsible charge of the facility should review the form and sign in the space provided. If the plant is required to have a licensed operator, the operator's certificate number should be reported in the space provided.
- 12. The principal executive officer should then review the form and sign in the space provided and provide a telephone number where he/she can be reached.
- 13. You are required to sample at the frequency and type indicated in your permit.
- 14. Send the completed form to your Dept. of Environmental Quality Regional Office by the 10th of each month.
- 15. You are required to retain a copy of the report for your records.
- 16. Where violations of permit requirements are reported, attach a brief explanation in accordance with the permit requirements describing causes and corrective actions taken. Reference each violation by date.
- 17. If you have any questions, contact the Dept. of Environmental Quality Regional Office.



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. VA0025160 Effective Date: June 1, 2009 Expiration Date: May 31, 2014

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, Part I - Effluent Limitations and Monitoring Requirements, and Part II - Conditions Applicable To All VPDES Permits, as set forth herein.

> Owner Name: City of Alexandria, Virginia Sanitation Authority Facility Name: Alexandria Advanced Wastewater Treatment Plant

> > City: Alexandria

Facility Location: 1500 Eisenhower Avenue, Alexandria, VA 22314

The owner is authorized to discharge to the following receiving stream:

Stream Name: Hunting Creek / Hooff Run

River Basin: Potomac River

River Subbasin: Lower Potomac River

Section: 6

Class: II

Special Standards: b, y

Thomas A. Faha

Director, Northern Regional Office Department of Environmental Quality

06 - 01 - 09 Date

A. Effluent Limitations and Monitoring Requirements

1. Outfall 001 - 54 MGD Facility

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. This facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration number VAN010059, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Dischargers and Nutrient Trading in the Chesapeake Watershed in Virginia.
- c. During the period beginning with the permit's effective date and lasting until issuance of the CTO for the 54 MGD upgrades or the expiration date; whichever occurs first, the permittee is authorized to discharge from Outfall Number 001. Such discharges shall be limited and monitored by the permittee as specified below.

Parameter	Discharge Limitations					Monitoring Requirements		
	Monthly A	Average (1)	Weekly	Average ⁽¹⁾	<u>Minimum</u>	$\underline{Maximum}^{(1)}$	Frequency	Sample Type
Flow ⁽²⁾ (MGD)	N	L	N/A		N/A	NL	Continuous	TIRE
pН	N/	'A	N	J/A	6.0 S.U.	9.0 S.U.	1/D	Grab
$cBOD_5$	5 mg/L	1000 kg/day	8 mg/L	1600 kg/day	N/A	N/A	1/D	24H-C
Total Suspended Solids, TSS	6.0 mg/L	1200 kg/day	9.0 mg/L	1800 kg/day	N/A	N/A	1/D	24H-C
DO	N/	'A	N	J/A	6.0 mg/L	N/A	1/D	Grab
Total Kjeldahl Nitrogen, TKN	NL n	ng/L	NL	mg/L	N/A	N/A	3D/W	24H-C
Ammonia, as N (April - October)	$1.0\mathrm{mg/L}$	200 kg/day	4.4 mg/L	900 kg/day	N/A	N/A	1/D	24H-C
Ammonia, as N (November – January)	8.4 m	ng/L	10	mg/L	N/A	N/A	1/D	24H-C
Ammonia, as N (February - March)	6.9 m	ng/L	8.5	mg/L	N/A	N/A	1/D	24H-C
E. coli (Geometric Mean)	126 n/1	00 mL	N	J/A	N/A	N/A	1/D	Grab
NO ₂ + NO ₃ as Nitrogen	NL n	ng/L	N	N/A	N/A	N/A	3D/W	24H-C
Total Nitrogen ⁽³⁾	NL n	ng/L	N	J/A	N/A	N/A	3D/W	Calculated
Total Nitrogen – Year to Date ⁽⁴⁾	NL n	ng/L	N	J/A	N/A	N/A	1/ M	Calculated
Total Nitrogen – Calendar Year (4) (5) (6) (7)	6.0 m	ng/L	N	J/A	N/A	N/A	1/Y	Calculated
Total Phosphorus	0.18 mg/L	81 lb/day	0.27 mg/L	120 lb/day	N/A	N/A	1/D	24H-C
Chronic Toxicity – C. dubia (TU _c) ⁽⁸⁾	N/	/A	N	J/A	N/A	NL	1/Y	24H-C
Chronic Toxicity – P. promelas (TU ₀) (8)	N/	/A	N	J/A	N/A	NL	1/Y	24H-C

(1)	See	Part	I.B.
	See	ran	LD.

The design flow is 54 MGD.

3D/W = Three days a week.

1/M = Once every month.

1/Y = Once every calendar year.

TIRE = Totalizing, indicating and recording equipment.

⁽³⁾ Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO₂+NO₃ Nitrogen and shall be calculated from the results of those tests.

⁽⁴⁾ See Part I.B.3. for nutrient reporting calculations.

 $MGD = \ Million \ gallons \ per \ day.$

N/A = Not applicable.

NL = No limit; monitor and report.

S.U. = Standard units.

^{1/}D = Once every day.

⁽⁵⁾ See Part I.F.4.

⁽⁶⁾ Should the permittee discharge from Outfall 002, the Total Nitrogen effluent data from Outfall 001 and Outfall 002 shall be averaged together for purposes of calculating compliance.

⁽⁷⁾ See Part I.F.8. Special Condition.

⁽⁸⁾ See Part I.D. for toxicity monitoring requirements.

²⁴H-C = A flow proportional composite sample collected manually or automatically, and discretely or continuously, for the entire discharge of the monitored 24-hour period. Where discrete sampling is employed, the permittee shall collect a minimum of twenty-four (24) aliquots for compositing. Discrete sampling may be flow proportioned either by varying the time interval between each aliquot or the volume of each aliquot. Time composite samples consisting of a minimum of twenty-four (24) grab samples obtained at hourly or smaller intervals may be collected where the permittee demonstrates that the discharge flow rate (gallons per minute) does not vary by 10% or more during the monitored discharge.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

1/D = Once every day.

3D/W = Three days a week.

1/M = Once every month.

1/Y =Once every calendar year.

2. Outfall 002 (Emergency Outfall) – 54 MGD Facility

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. This facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration number VAN010059, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Dischargers and Nutrient Trading in the Chesapeake Watershed in Virginia.
- c. During the period beginning with the permit's effective date and lasting until the issuance of the CTO for the 54 MGD upgrades or the expiration date; whichever occurs first, the permittee is authorized to discharge from Outfall Number 002. Such discharges shall be limited and monitored by the permittee as specified below.

Parameter	Discharge Limitations				Monitoring Requirements			
	Monthly .	Average (1)	Weekly	Average ⁽¹⁾	<u>Minimum</u>	$\underline{Maximum}^{(1)}$	Frequency	Sample Type
Flow ⁽²⁾ (MGD)	N	NL	1	N/A	N/A	NL	Continuous	TIRE
pН	N	I/A	1	N/A	6.0 S.U.	9.0 S.U.	1/D	Grab
cBOD ₅	5 mg/L	1000 kg/day	8 mg/L	1600 kg/day	N/A	N/A	1/D	24H-C
Total Suspended Solids, TSS	6.0 mg/L	1200 kg/day	9.0 mg/L	1800 kg/day	N/A	N/A	1/D	24H-C
DO	N	I/A	1	N/A	6.0 mg/L	N/A	1/D	Grab
Total Kjeldahl Nitrogen, TKN	NL	mg/L	NL	mg/L	N/A	N/A	3D/W	24H-C
Ammonia, as N (April – October)	1.0 mg/L	200 kg/day	4.4 mg/L	900 kg/day	N/A	N/A	1/D	24H-C
Ammonia, as N (November – January)	8.41	mg/L	10	mg/L	N/A	N/A	1/D	24H-C
Ammonia, as N (February – March)	6.91	mg/L	8.5	mg/L	N/A	N/A	1/D	24H-C
E. coli (Geometric Mean)	126 n/	100 mL	1	N/A	N/A	N/A	1/D	Grab
Total Residual Chlorine (after dechlorination)	0.009	9 mg/L	0.01	1 mg/L	N/A	N/A	1/D	Grab
NO ₂ + NO ₃ as Nitrogen	NL	mg/L	1	N/A	N/A	N/A	3D/W	24H-C
Total Nitrogen ⁽³⁾	NL	mg/L	1	N/A	N/A	N/A	3D/W	Calculated
Total Nitrogen – Year to Date ⁽⁴⁾	NL	mg/L	1	N/A	N/A	N/A	1/M	Calculated
Total Nitrogen – Calendar Year (4) (5) (6) (7)	6.0 1	mg/L	1	N/A	N/A	N/A	1/Y	Calculated
Total Phosphorus	0.18 mg/L	81 lb/day	0.27 mg/L	120 lb/day	N/A	N/A	1/D	24H-C
Chronic Toxicity – C. dubia (TU _c) (8)	N	I/A	I	N/A	N/A	NL	1/Y	24H-C
Chronic Toxicity – P. promelas (TU _c) ⁽⁸⁾	N	I/A	1	N/A	N/A	NL	1/Y	24H-C

(1) See Part I.B.

(2) The design flow is 54 MGD.

Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO₂+NO₃ Nitrogen and shall be calculated from the results of those tests.

(4) See Part I.B.3. for nutrient reporting calculations.

MGD = Million gallons per day.

N/A = Not applicable.

NL = No limit; monitor and report.

S.U. = Standard units.

TIRE = Totalizing, indicating and recording equipment.

(5) See Part I.F.4.

⁽⁶⁾ Should the permittee discharge from Outfall 002, the Total Nitrogen effluent data from Outfall 001 and Outfall 002 shall be averaged together for purposes of calculating compliance.

⁽⁷⁾ See Part I.F.8. Special Condition.

⁽⁸⁾ See Part I.D. for toxicity monitoring requirements.

²⁴H-C = A flow proportional composite sample collected manually or automatically, and discretely or continuously, for the entire discharge of the monitored 24-hour period. Where discrete sampling is employed, the permittee shall collect a minimum of twenty-four (24) aliquots for compositing. Discrete sampling may be flow proportioned either by varying the time interval between each aliquot or the volume of each aliquot. Time composite samples consisting of a minimum of twenty-four (24) grab samples obtained at hourly or smaller intervals may be collected where the permittee demonstrates that the discharge flow rate (gallons per minute) does not vary by 10% or more during the monitored discharge.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

3. Outfall 001 – 54 MGD Facility

- There shall be no discharge of floating solids or visible foam in other than trace amounts.
- This facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration number VAN010059, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Dischargers and Nutrient Trading in the Chesapeake Watershed in Virginia.
- During the period beginning with the issuance of the CTO for the 54 MGD upgrades and lasting until the expiration date, the permittee is authorized to discharge from Outfall Number 001. Such discharges shall be limited and monitored by the permittee as specified below.

Parameter	Discharge Limitations				Monitoring Requirements			
	Monthly	Average (1)	Weekly	Average ⁽¹⁾	<u>Minimum</u>	$\underline{Maximum}^{(1)}$	Frequency	Sample Type
Flow ⁽²⁾ (MGD)]	NL	1	N/A	N/A	NL	Continuous	TIRE
pН	1	N/A	1	N/A	6.0 S.U.	9.0 S.U.	1/D	Grab
cBOD ₅	5 mg/L	1000 kg/day	8 mg/L	1600 kg/day	N/A	N/A	1/D	24H-C
Total Suspended Solids, TSS	6.0 mg/L	1200 kg/day	9.0 mg/L	1800 kg/day	N/A	N/A	1/D	24H-C
DO	1	N/A	1	N/A	6.0 mg/L	N/A	1/D	Grab
Total Kjeldahl Nitrogen, TKN	NL	mg/L	NL	mg/L	N/A	N/A	3D/W	24H-C
Ammonia, as N (April - October)	$1.0\mathrm{mg/L}$	200 kg/day	4.4 mg/L	900 kg/day	N/A	N/A	1/D	24H-C
Ammonia, as N (November – January)	8.4	mg/L	10	mg/L	N/A	N/A	1/D	24H-C
Ammonia, as N (February - March)	6.9	mg/L	8.5	mg/L	N/A	N/A	1/D	24H-C
E. coli (Geometric Mean)	126 n	/100 mL	1	N/A	N/A	N/A	1/D	Grab
NO ₂ + NO ₃ as Nitrogen	NL	mg/L	1	N/A	N/A	N/A	3D/W	24H-C
Total Nitrogen ⁽³⁾	NL	mg/L	1	N/A	N/A	N/A	3D/W	Calculated
Total Nitrogen – Year to Date ⁽⁴⁾	NL	mg/L	1	N/A	N/A	N/A	1/M	Calculated
Total Nitrogen – Calendar Year (4) (5) (6) (7)	3.0	mg/L	1	N/A	N/A	N/A	1/Y	Calculated
Total Phosphorus	0.18 mg/L	81 lb/day	0.27 mg/L	120 lb/day	N/A	N/A	1/D	24H-C
Chronic Toxicity – C. dubia (TU _c) ⁽⁸⁾	1	N/A	1	N/A	N/A	NL	1/Y	24H-C
Chronic Toxicity – P. promelas (TU _c) (8)	1	N/A	1	N/A	N/A	NL	1/Y	24H-C

(1) See Part I.B.

The design flow is 54 MGD.

Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO₂+NO₃ Nitrogen and shall be calculated from the results of those tests.

See Part I.B.3. for nutrient reporting calculations.

MGD = Million gallons per day.

N/A = Not applicable.

NL = No limit; monitor and report.

S.U. = Standard units.

1/M = Once every month.

1/Y = Once every calendar year.

1/D = Once every day. 3D/W = Three days a week.

TIRE = Totalizing, indicating and recording equipment.

- Should the permittee discharge fom Outfall 002, the Total Nitrogen effluent data from Outfall 001 and Outfall 002 shall be averaged together for purposes of calculating compliance.
- See Part I.F.8. Special Condition.
- See Part I.D. for toxicity monitoring requirements.

24H-C = A flow proportional composite sample collected manually or automatically, and discretely or continuously, for the entire discharge of the monitored 24-hour period. Where discrete sampling is employed, the permittee shall collect a minimum of twenty-four (24) aliquots for compositing. Discrete sampling may be flow proportioned either by varying the time interval between each aliquot or the volume of each aliquot. Time composite samples consisting of a minimum of twenty-four (24) grab samples obtained at hourly or smaller intervals may be collected where the permittee demonstrates that the discharge flow rate (gallons per minute) does not vary by 10% or more during the monitored discharge.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

1/D = Once every day.

3D/W = Three days a week.

1/M = Once every month.

1/Y = Once every calendar year.

4. Outfall 002 (Emergency Outfall) – 54 MGD Facility

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. This facility has Total Nitrogen and Total Phosphorus calendar year load limits associated with this outfall included in the current Registration List under registration number VAN010059, enforceable under the General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Dischargers and Nutrient Trading in the Chesapeake Watershed in Virginia.
- c. During the period beginning with the issuance of the CTO for the 54 MGD upgrades and lasting until the expiration date, the permittee is authorized to discharge from Outfall Number 002. Such discharges shall be limited and monitored by the permittee as specified below.

Parameter	Discharge Limitations					Monitoring	Requirements	
	Monthly	Average (1)	Weekly	Average ⁽¹⁾	<u>Minimum</u>	$\underline{Maximum}^{(1)}$	Frequency	Sample Type
Flow ⁽²⁾ (MGD)	1	NL	N/A		N/A	NL	Continuous	TIRE
pН	N	V/A	1	N/A	6.0 S.U.	9.0 S.U.	1/D	Grab
$cBOD_5$	5 mg/L	1000 kg/day	8 mg/L	1600 kg/day	N/A	N/A	1/D	24H-C
Total Suspended Solids, TSS	6.0 mg/L	1200 kg/day	9.0 mg/L	1800 kg/day	N/A	N/A	1/D	24H-C
DO	N	N/A	N/A		6.0 mg/L	N/A	1/D	Grab
Total Kjeldahl Nitrogen, TKN	NL	mg/L	NL	mg/L	N/A	N/A	3D/W	24H-C
Ammonia, as N (April – October)	$1.0\mathrm{mg/L}$	200 kg/day	4.4 mg/L	900 kg/day	N/A	N/A	1/D	24H-C
Ammonia, as N (November – January)	8.4	8.4 mg/L		mg/L	N/A	N/A	1/D	24H-C
Ammonia, as N (February – March)	6.9	mg/L	8.5	mg/L	N/A	N/A	1/D	24H-C
E. coli (Geometric Mean)	126 n	/100 mL	1	N/A	N/A	N/A	1/D	Grab
Total Residual Chlorine (after dechlorination)	0.00	9 mg/L	0.01	1 mg/L	N/A	N/A	1/D	Grab
NO ₂ + NO ₃ as Nitrogen	NL	mg/L	1	N/A	N/A	N/A	3D/W	24H-C
Total Nitrogen ⁽³⁾	NL	mg/L	1	N/A	N/A	N/A	3D/W	Calculated
Total Nitrogen - Year to Date ⁽⁴⁾	NL	mg/L	1	N/A	N/A	N/A	1/M	Calculated
Total Nitrogen – Calendar Year (4) (5) (6) (7)	3.0	mg/L	1	N/A	N/A	N/A	1/Y	Calculated
Total Phosphorus	0.18 mg/L	81 lb/day	0.27 mg/L	120 lb/day	N/A	N/A	1/D	24H-C
Chronic Toxicity – C. dubia (TU _c) ⁽⁸⁾	N	J/A	1	N/A	N/A	NL	1/Y	24H-C
Chronic Toxicity – P. promelas (TUc) (8)	N	J/A	1	N/A	N/A	NL	1/Y	24H-C

(1) See Part I.B.

(2) The design flow is 54 MGD.

(3) Total Nitrogen is the sum of Total Kjeldahl Nitrogen and NO₂+NO₃ Nitrogen and shall be calculated from the results of those tests.

(4) See Part I.B.3. for nutrient reporting calculations.

MGD = Million gallons per day.

N/A = Not applicable.

NL = No limit; monitor and report.

S.U. = Standard units.

TIRE = Totalizing, indicating and recording equipment.

(5) See Part I.F.4.

(6) Should the permittee discharge from Outfall 002, the Total Nitrogen effluent data from Outfall 001 and Outfall 002 shall be averaged together for purposes of calculating compliance.

(7) See Part I.F.8. Special Condition.

8) See Part I.D. for toxicity monitoring requirements.

24H-C = A flow proportional composite sample collected manually or automatically, and discretely or continuously, for the entire discharge of the monitored 24-hour period. Where discrete sampling is employed, the permittee shall collect a minimum of twenty-four (24) aliquots for compositing. Discrete sampling may be flow proportioned either by varying the time interval between each aliquot or the volume of each aliquot. Time composite samples consisting of a minimum of twenty-four (24) grab samples obtained at hourly or smaller intervals may be collected where the permittee demonstrates that the discharge flow rate (gallons per minute) does not vary by 10% or more during the monitored discharge.

Grab = An individual sample collected over a period of time not to exceed 15-minutes.

5. Sewage Sludge

During the period beginning with the permit's effective date and lasting until the permit expiration date, the permittee is authorized to manage sewage sludge according to the approved Sludge Management Plan. The pollutants in the sewage sludge shall be limited and monitored by the permittee as specified below. All samples shall be collected and analyzed in accordance with the approved O&M Manual.

a. <u>Sewage Sludge Annual Production Monitoring (SP1)</u>

The permittee shall report the annual total amount of sludge produced (in dry metric tons).

Data shall be reported on the Discharge Monitoring Report (DMR) for discharge number SP1.

See Part I.E.3. for reporting requirements.

b. <u>Sewage Sludge Chemical Limitations and Monitoring Requirement (S01)</u>

Chemical Pollutant Characteristics (1)

SLUDGE CHARACTERISTIC	LIMITATION	MONITORING	REQUIREMENTS	
	Ceiling Concentration Maximum	Monthly Average	Frequency	Sample Type
Percent Solids (%)	N/A	NL	1/Y	Composite
Arsenic, Sludge	75 mg/kg	41 mg/kg	1/Y	Composite
Cadmium, Sludge	85 mg/kg	39 mg/kg	1/Y	Composite
Copper, Sludge	4300 mg/kg	1500 mg/kg	1/Y	Composite
Lead, Sludge	840 mg/kg	300 mg/kg	1/Y	Composite
Mercury, Sludge	57 mg/kg	17 mg/kg	1/Y	Composite
Molybdenum, Sludge	75 mg/kg	N/A	1/Y	Composite
Nickel, Sludge	420 mg/kg	420 mg/kg	1/Y	Composite
Selenium, Sludge	100 mg/kg	100 mg/kg	1/Y	Composite
Zinc, Sludge	7500 mg/kg	2800 mg/kg	1/Y	Composite

⁽¹⁾ All samples shall be collected and analyzed in accordance with approved EPA procedures.

1/Y = Once per calendar year.

N/A = Not applicable.

NL = No limit; monitor and report.

mg/kg = Milligrams per kilogram, dry weight.

The permittee shall achieve pathogen reduction in accordance with the approved Sludge Management Plan. The permittee shall verify in the annual report that the pathogen reduction is achieved by means of appropriate documentation. The permittee shall perform monitoring and maintain bench sheets to insure that the vector attraction reduction requirements are obtained. Copies of the bench sheets shall be submitted with the annual reports for sludge.

The requirements shall be met as specified below:

Class A Biosolids are produced by heating the sewage sludge, anaerobic digestion and reducing the mass of volatile solids by a minimum of 38 percent. The pathogen reduction requirements are found in 9 VAC 25-31-710.A.7 – Alternative 5: Processes to Further Reduce Pathogens, Option 7, Pasteurization. The vector attraction requirement is found in 9 VAC 25-31-720.B.1: The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38 percent.

Class B Biosolids are produced by lime stabilizing centrifuged solids as prescribed in the Federal and State Biosolids Regulations. The pathogen reduction requirements are found in 9 VAC 25-31-710.B.3 – Alternative 2: Processes to Significantly Reduce Pathogens, Option 5, Lime Stabilization. The vector attraction requirements are found in 9 VAC 25-31-720.B.6: The pH of sewage sludge shall be raised to 12 or higher by alkaline addition and without the addition of more alkaline material, shall remain at 12 or higher for two hours and then at 11.5 or higher for an additional 22 hours.

Class B Biosolids are produced by anaerobic digestion. The pathogen reduction requirements are found in 9 VAC 25-31-710.B.3 – Alternative 2: Processes to Significantly Reduce Pathogens, Option 3 Anaerobic Digestion. The vector attraction reduction requirements are found in 9 VAC 25-31-720.B.1: The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38 percent.

B. Additional Monitoring Requirements, Quantification Levels and Compliance Reporting

1. Quantification Levels

a. Maximum quantification levels (QLs) shall be as follows:

<u>Characteristic</u>	Quantification Level
TSS	1.0 mg/L
cBOD ₅	5 mg/L
E. coli	2n/100mL
Dissolved Oxygen	0.20 mg/L
Ammonia	0.20 mg/L
TRC	0.10 mg/L

- b. The permittee may use any approved method, which has a QL equal to or lower than the QL listed in B. 1.a. above. The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method.
- c. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained.

2. Compliance Reporting for parameters in Part I.A.

- a. Monthly Average Compliance with the monthly average limitations and/or reporting requirements for the parameters, except for nitrogen and phosphorus parameters, listed in Part I.A. shall be determined as follows: All concentration data below the QL listed in B.1.a. above shall be treated as zero. All concentration data equal to or above the QL listed in B.1.a. above shall be treated as it is reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, for the month. This arithmetic average shall be reported on the DMR as calculated. If all data are below the QL then the average shall be reported as < QL. If reporting for quantity is required on the DMR and the calculated concentration is < QL then report < QL for the quantity, otherwise use the calculated concentration to determine the monthly average quantity.
- b. Maximum Weekly Average Compliance with the weekly average limitations and/or reporting requirements for the parameters, except for nitrogen and phosphorus parameters, listed in Part I.A. shall be determined as follows: All concentration data below the QL listed in B.1.a. above shall be treated as zero. All concentration data equal to or above the QL listed in B.1.a. shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each complete calendar week entirely contained within the reporting month. The maximum value of the weekly averages thus determined shall be reported on the DMR. If all data reported is less than the QL then < QL shall be reported on the DMR. If reporting for quantity is required on the DMR and the calculated concentration is < QL then report < QL for the quantity, otherwise use the calculated concentration to determine the weekly average quantity.
- c. Any single datum required shall be reported as < QL if it is less than the QL in B.1.a. above. Otherwise the numerical value shall be reported.
- d. The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used (i.e., 5 always rounding up or to the nearest even number) by the permittee, the permittee shall use the convention consistently and shall ensure that consulting laboratories employed by the permittee use the same convention.

3. Nutrient Reporting Calculations for Part I.A.

a. For each calendar month, the DMR shall show the calendar year-to-date average concentration (mg/L) calculated in accordance with the following formulae:

$$\begin{split} MC_{avg}\text{-}YTD &= (\ \sum_{(Jan\text{-}current\ month)} MC_{avg}\) \div (\ \#\ of\ months\) \end{split}$$
 Where:
$$MC_{avg}\text{-}YTD = calendar\ year\text{-}to\text{-}date\ average\ concentration\ } (mg/L)$$

$$MC_{avg} = monthly\ average\ concentration\ } (mg/L)\ as\ reported\ on\ DMR$$

b. The total nitrogen average concentrations (mg/L) for each calendar year (AC) shall be shown on the December DMR due January 10th of the following year. These values shall be calculated in accordance with the following formulae:

$$AC_{avg}$$
 = ($\sum_{(Jan\text{-}Dec)} MC_{avg}$) \div 12
Where :
$$AC_{avg} = calendar \ year \ average \ concentration \ (mg/L)$$

$$MC_{avg} = monthly \ average \ concentration \ (mg/L) \ as \ reported \ on \ DMR$$

- c. For Total Phosphorus, all daily concentration data below the quantification level (QL) for the analytical method used should be treated as half the QL. All daily concentration data equal to or above the QL for the analytical method used shall be treated as it is reported.
- d. For Total Nitrogen (TN), if none of the daily concentration data for the respective species (i.e. Nitrates/Nitrites, TKN) are equal to or above the QL for the respective analytical methods used, the daily TN concentration value reported shall equal one half of the largest QL used for the respective species. If one of the data is equal to or above the QL, the daily TN concentration value shall be treated as that data point is reported. If more than one of the data is above the QL, the daily TN concentration value shall equal the sum of the data points as reported.

C. Pretreatment Requirements

1. The permittee's pretreatment program has been approved. The program is an enforceable part of this permit.

The permittee shall:

a. Before or on 1 December 2009, submit to the DEQ Northern Regional Office a survey of all Industrial Users meeting the requirements of the VPDES Permit regulation, 9 VAC 25-31-10 et seq. and are discharging to the POTW. The information shall be submitted to the POTW on the DEQ's Discharger Survey Form or an equivalent form that includes the quantity and quality of the wastewater. Survey results shall include the identification of Significant Industrial Users of the POTW.

In lieu of the survey, the permittee may elect to develop and submit for approval a plan to continuously survey the industrial community in their jurisdiction. This plan must be implemented within 90 days of its approval by DEQ.

- b. Before or on 1 June 2010, the permittee shall develop or reevaluate the local limits using current influent, effluent and sludge monitoring data and submit the data and results of the evaluation to the DEQ Northern Regional Office. All Significant Industrial Users shall be sampled at the end of any categorical process and at the entrance to the treatment works.
- c. Submit to the DEQ Northern Regional Office an annual report that describes the permittee's program activities over the previous year. The annual report shall be submitted no later than January 31st of each year and shall include:
 - 1) An updated list of the Significant Industrial Users (SIUs) noting all of the following:
 - a) facility address and contact name;
 - b) explanation of SIUs deleted from the previous years list;

- c) identify which IUs are subject to Categorical Standards and note which Standard (i.e. metal finishing);
- d) specify which 40 CFR part(s) is/are applicable;
- e) indicate which IUs are subject to local standards that are more stringent than Categorical Pretreatment Standards;
- f) indicate which IUs are subject only to local requirements;
- g) identify which IUs are subject to Categorical Pretreatment Standards that are subject to reduced reporting requirements under 9 VAC 25-31-840.E.3.; and
- h) identify which IUs are non-significant Categorical Industrial Users.
- A summary of the compliance status of each Significant Industrial User with pretreatment standards and permit requirements.
- 3) A summary of the number and types of Significant Industrial User sampling and inspections performed by the POTW.
- 4) All information concerning any interference, upset, VPDES permit or Water Quality Standards violations directly attributable to Significant Industrial Users and enforcement actions taken to alleviate said events.
- 5) A description of all enforcement actions taken against Significant Industrial Users over the previous 12 months.
- 6) A summary of any changes to the submitted pretreatment program that has not been previously reported to the DEQ Northern Regional Office.
- 7) A summary of the permits issued to Significant Industrial Users since the last annual report.
- 8) POTW and self-monitoring results for Significant Industrial Users determined to be in significant non-compliance during the reporting period.
- 9) Results of the POTW's influent/effluent/sludge sampling, not previously submitted to DEQ.
- 10) Copies of newspaper publications of all Significant Industrial Users in significant non-compliance during the reporting period. This is due no later than March 31st of each year.
- 11) Signature of an authorized representative.
- d. Submit any changes to the approved pretreatment program to the DEQ Northern Regional Office and obtain approval before implementation of the changes.
- e. Ensure all Significant Industrial Users' permits are issued and reissued in a timely manner and that the Significant Industrial User permits issued by the POTW are effective and enforceable.
- f. Inspect and sample all Significant Industrial Users at a minimum of once a year.
 - 1) Sampling shall include all regulated parameters and shall be representative of the wastewater discharged.
 - 2) Inspection of the Significant Industrial Users shall cover all areas which could result in wastewater discharge to the treatment works including manufacturing, chemical storage, pretreatment facilities, spill prevention and control procedures, hazardous waste generation and Significant Industrial User's self-monitoring records.
- g. Implement the reporting requirements of Part VII of the VPDES Permit Regulation.
- h. Review the Enforcement Response Plan (ERP) and ensure it meets state and federal regulator requirements. The approved ERP is an enforceable part of this permit and shall be implemented.

- i. Ensure that adequate resources are available to implement the approved program.
- j. Meet all public participation requirements and annually public notice Significant Industrial Users in significant noncompliance with pretreatment standards and requirements for the previous 12 months.
- 2. The DEQ may require the POTW to institute changes to its pretreatment program:
 - a. If the approved program is not implemented in a way satisfying the requirements of the Clean Water Act, Water Control Law or State regulations;
 - b. If problems such as pass-through, interference, water quality standards violations or sludge contamination develop or continue; and
 - c. If federal, state or local requirements change.

3. Program Streamlining:

- a. The Control Authority may determine that an Industrial User subject to categorical Pretreatment Standards under 9 VAC 25-31-780 and 40 CFR chapter I, subchapter N is a Non-Significant Categorical Industrial User rather than a Significant Industrial User on a finding that the Industrial User never discharges more than 100 gallons per day (gpd) of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater; unless specifically included in the Pretreatment Standard) and the following conditions are met:
 - 1) The Industrial User, prior to Control Authority's finding, has consistently complied with all applicable categorical Pretreatment Standards and Requirements;
 - 2) The Industrial User annually submits the certification statement required in 9 VA C 25-31-840 together with any additional information necessary to support the certification statement; and
 - 3) The Industrial User never discharges any untreated concentrated wastewater.
- b. Upon a finding that an industrial user, meeting the criteria in subdivision 3.a. of this definition, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the control authority may at any time, on its own initiative or in response to a petition received from an industrial user or POTW and in accordance with Part VII (9 VAC 25-31-730 et seq.) of this chapter, determine that such industrial user is not a significant industrial user.
- c. A Significant Industrial User (SIU) is an industrial user that:
 - 1) Is subject to Categorical Pretreatment Standards under 9 VAC 25-31-780 and incorporated by reference in 9 VAC 25-31-30;
 - 2) Discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater);
 - 3) Contributes a process waste stream which makes up 5% or more of the average dry weather hydraulic or organic capacity of the POTW; or
 - 4) Has reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.

D. Toxics Monitoring Program Requirements

1. <u>Biological Monitoring</u>

a. In accordance with the schedule in D.2. below, the permittee shall conduct annual chronic toxicity tests using *Ceriodaphnia dubia* and *Pimephales promelas* as the test species. The permittee should collect 24-hour flow-proportioned composite samples of the final effluent from Outfall 001.

The chronic tests to use are:

Chronic 3-Brood Static Renewal Survival and Reproduction Test using Ceriodaphnia dubia

Chronic 7-Day Static Renewal Survival and Growth Test using Pimephales promelas

These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results which cannot be quantified (i.e., a "less than" NOEC value) are not acceptable and a retest will have to be performed within the compliance period. The NOEC as determined by hypothesis testing shall be converted to TU_c (Chronic Toxic Units) for DMR reporting where $TU_c = 100/NOEC$. Report the LC_{50} at 48 hours and the IC_{25} with the NOEC's in the test report.

- b. The permittee may provide additional samples to address data variability. These data shall be reported. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.
- c. The test dilutions shall be able to determine compliance with the following endpoints:

Chronic NOEC \geq 100% is equivalent to a TU_c \leq 1.0

- d. The test data will be evaluated for reasonable potential. If data indicates that a limit is warranted, the permit may be modified to include a WET limit and compliance schedule.
- e. The permit may be modified or revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. The pollutant specific limits must control the toxicity of the effluent.
- f. The results of the test and the test report shall be reported with the DMR for the month following the receipt of the testing results. In no case shall this exceed 45 days from the completion of the test.

2. Reporting Schedule

The permittee shall monitor during the specified period, report the results on the DMR and shall supply a copy of the toxicity test report specified in this Toxics Management Program in accordance with the following schedule:

Period	Sampling Period	DMR/Report Submission Dates
Annual 1	1 January 2010 – 31 December 2010	10 January 2011
Annual 2	1 January 2011 – 31 December 2011	10 January 2012
Annual 3	1 January 2012 – 31 December 2012	10 January 2013
Annual 4	1 January 2013 – 31 December 2013	10 January 2014

E. Sludge Management and Reporting Requirements

Sludge Reopener

The Board may promptly modify or revoke and reissue this permit if any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.

2. Sludge Use and Disposal

The permittee shall conduct all sewage sludge use or disposal activities in accordance with the Sludge Management Plan (SMP) approved with the issuance of this permit. Any proposed changes in the sewage sludge use or disposal practices or procedures followed by the permittee shall be documented and submitted for DEQ approval 90 days prior to the effective date of the changes. Upon approval, the revised SMP becomes an enforceable part of the permit. The permit may be modified or alternatively revoked and reissued to incorporate limitations or conditions necessitated by substantive changes in sewage sludge use or disposal practices.

3. Sludge Monitoring Frequency and Reporting Requirements

a. Monitoring Frequency

The required sludge monitoring frequency shall be once per year (1/Y) for all parameters in Part I.A.5., except for fecal coliform and *Salmonella*; provided the results of the monitoring for all limited pollutants remain less than 75% of the monthly average concentration listed in Part I.A.5. for each monitoring event.

Should the pollutant concentration limitation specified for any parameter exceed 75% of the monthly average concentration limitation specified in Part I.A.5., the monitoring frequency shall be increased to once per two months (1/2M) and shall remain in effect for a period of two years. If, after the two year monitoring period, the results indicate that the pollutant concentration limitations remain less than 75% of the monthly average concentration listed in Part I.A.5., the permittee may request that the monitoring frequency of once per year (1/Y) be re-instated.

b. Reporting Requirements

1) Reporting Responsibilities:

The permittee shall provide the results of all monitoring performed in accordance with Part I.A.5., and information on management practices, land application sites, site restrictions (if applicable) and appropriate certifications not later than February 19th of each year to the Department of Environmental Quality – Northern Regional Office. Each report is for the previous calendar year's activity. If no sewage sludge was applied to the land during the reporting period, "no sewage sludge applied" shall be reported.

2) Record Keeping:

The permittee is required to retain the following information for at least five years:

- a) The concentrations of each pollutant in Part I.A.5.;
- b) A description of how the pathogen reduction requirements in Part I.A.5. are met;
- c) A description of how the vector attraction reduction requirements in Part I.A.5. are met;
- d) A description of how the management practices specified in the approved Sludge Management Plan and/or this permit are met;
- e) A description of how the site restrictions specified in the approved Sludge Management Plan and/or this permit are met; and
- f) The following certification statement:

"I certify, under penalty of law, that the information that will be used to determine compliance with the pathogen requirements in 9 VAC 25-31-710.B., vector attraction reduction requirements in [permittee shall insert one of the vector attraction reduction requirements in 9 VAC 25-31-720.B.1 through B.10], the management practices in 9 VAC 25-31-550, and the site restrictions in 9 VAC 25-31-710.B.5 was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

F. Other Requirements and Special Conditions

1. 95% Capacity Reopener

A written notice and a plan of action for ensuring continued compliance with the terms of this permit shall be submitted to the Northern Regional Office when the monthly average flow influent to the sewage treatment plant reaches 95% of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the Northern Regional Office no later than 90 days from the third consecutive month for which the flow reached 95% of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of this permit.

2. <u>Indirect Dischargers</u>

The permittee shall provide adequate notice to the Department of the following:

- a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Section 301 or 306 of Clean Water Act and the State Water Control Law if it were directly discharging those pollutants; and
- b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of this permit.
- c. Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the treatment works and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works.

3. Operation and Maintenance (O&M) Manual Requirement

The permittee shall review the existing Operations and Maintenance (O&M) Manual and notify the DEQ Northern Regional Office, in writing before or on 1 September 2009, whether it is still accurate and complete. If the O&M Manual is no longer accurate and complete, a revised O&M Manual shall be submitted for approval to the DEQ Northern Regional Office before or on 1 September 2009. The permittee will maintain an accurate, approved O&M Manual for the treatment works. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

- a. Treatment system design, treatment system operation, routine preventative maintenance of units within the treatment system, critical spare parts inventory and record keeping;
- b. Techniques to be employed in the collection, preservation and analysis of effluent samples (and sludge samples if sludge analyses are required);
- c. Procedures for handling, storing and disposing of all wastes, fluids and pollutants that will prevent these materials from reaching state waters;
- d. A plan for the management and/or disposal of waste solids and residues (Sludge Management Plan); and
- e. Discussion of Best Management Practices, if applicable.

Any changes in the practices and procedures followed by the permittee shall be documented and submitted for staff approval within 90 days of the effective date of the changes. Upon approval of the submitted manual changes, the revised manual becomes an enforceable part of the permit. Noncompliance with the O&M Manual shall be deemed a violation of the permit.

4. CTC and CTO Requirement

The permittee shall, in accordance with *Sewage Collection and Treatment* regulation (9 VAC 25-790) obtain a Certificate to Construct (CTC) and a Certificate to Operate (CTO) from the Department of Environmental Quality prior to constructing wastewater treatment works and operating the treatment works respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit.

Upon issuance of a CTC, DEQ staff shall initiate modification, or alternately, revocation and reissuance, of this permit, to include annual concentration limits based on the nutrient removal technology listed in the CTC. Upon issuance of a CTO, any nutrient removal facilities installed shall be operated to achieve design effluent levels.

5. Licensed Operator Requirement

The permittee shall employ or contract at least one Class I licensed wastewater works operator for this facility. The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators. The permittee shall notify the Department in writing whenever he is not complying or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

6. Reliability Class

The permitted treatment works shall meet Reliability Class I.

7. E3/E4

The annual average concentration limitations for Total Nitrogen and/or Total Phosphorus are suspended during any calendar year in which the facility is considered by DEQ to be a participant in the Virginia Environmental Excellence Program in good standing at either the Exemplary Environmental Enterprise (E3) level or the Extraordinary Environmental Enterprise (E4) level, provided that the following conditions have also been met:

- a. The facility has applied for (or renewed) participation, been accepted, maintained a record of sustained compliance and submitted an annual report according to the program guidelines;
- b. The facility has demonstrated that they have in place a fully implemented environmental management system (EMS) with an alternative compliance method that includes operation of installed nutrient removal technologies to achieve the annual average concentration limitations; and
- c. The E3/E4 designation from DEQ and implementation of the EMS has been in effect for the full calendar year.

The annual average concentration limitations for Total Nitrogen and/or Phosphorus, as applicable, are not suspended in any calendar year following a year in which the facility failed to achieve the annual average concentration limitations as required by 7.b. above.

8. Total Nitrogen – Annual Average Concentration

The permittee shall maintain and operate the facility as to optimize Total Nitrogen removal during the Nutrient Removal Technology (NRT) upgrades. An annual average TN concentration of 3.0 mg/L will take effect January 1st following issuance of the CTO upon completion of the 54 MGD plant upgrades.

9. <u>Final Effluent Monitoring Alternative</u>

The permittee may develop an effluent specific correlation between $cBOD_5$ and TOC/COD for final effluent compliance monitoring as specified below:

- a. The permittee must submit to DEQ for review and approval a plan of study prior to the start of the study. The study shall include, at a minimum, the following information:
 - 1) The method of analysis for TOC/COD;
 - 2) The QA/QC procedures for the method;
 - 3) The time frame for the study;
 - 4) The number of samples to be analyzed to establish the correlation;
 - 5) The statistical methods for determining the correlation; and
 - 6) The method of validating the established correlation.
- b. Once the study is completed and a correlation is established, the data, QA/QC information and correlation calculations are to be submitted to DEQ for review and approval. Upon DEQ's approval of the results, final effluent monitoring for TOC/COD will be once per day and sampling will be 24-hour composites. Monitoring for cBOD₅ shall be reduced to once per week for the remaining term of the permit. TOC/COD shall be reported in accordance with Part II.C.

- c. The permittee shall validate the established correlation monthly, as outlined in the plan of study and submit the validation with the monthly DMR. The permittee shall also submit a summary of the validation data with the permit application at least 180 days prior to the expiration of the current permit. The method of validation in the plan of study shall be an enforceable part of the permit.
- d. DEQ may require the resumption of cBOD₅ daily monitoring should it determine that the correlation is no longer valid. The permittee may discontinue TOC/COD final effluent monitoring and return to cBOD₅ monitoring upon notifying DEQ in writing. TOC/COD daily monitoring will cease the first day of the following month after notification.

10. Nutrient Reopener

This permit may be modified or, alternatively, revoked and reissued:

- a. If any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements;
- b. To incorporate technology-based effluent concentration limitations for nutrients in conjunction with the installation of nutrient control technology, whether by new construction, expansion or upgrade, or
- c. To incorporate alternative nutrient limitations and/or monitoring requirements, should:
 - i. the State Water Control Board adopt new nutrient standards for the water body receiving the discharge, including the Chesapeake Bay or its tributaries, or
 - ii. a future water quality regulation or statute require new or alternative nutrient control.

11. PCB Monitoring

The permittee shall monitor the effluent at Outfall 001 for Polychlorinated Biphenyls (PCBs). DEQ will use these data for the implementation of the approved PCB TMDL for the Tidal Portions of the Potomac and Anacostia Rivers in the District of Columbia, Maryland and Virginia (approved 31 October 2007 by EPA). The permittee shall conduct the sampling and analysis in accordance with the requirements specified below.

At a minimum:

- a. Monitoring and analysis shall be conducted in accordance with the most current version of EPA Method 1668 or other equivalent methods capable of providing low-detection level, congener specific results. Any equivalent method shall be submitted to DEQ-NRO for review and approval prior to sampling and analysis. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures.
- b. The permittee shall collect 2 wet weather samples and 2 dry weather samples during the term of the permit. Samples previously collected, analyzed and approved by DEQ utilizing a low-detection level, congener specific method, may be used in satisfying the total number of samples required even if the collection occurred prior to the current permit term.

Wet weather samples shall be defined by the permittee based on the permittee's decision criteria for their facility. The wet weather decision criteria shall be submitted to DEQ-NRO before or on 1 September 2009 for review and approval prior to any PCB sampling. The permittee shall maintain documentation to demonstrate that wet weather flows achieve these criteria. The documentation shall be available to DEQ-NRO upon request.

Dry weather samples are defined as those taken at Outfall 001 following at least a 72 hour period with no measurable rainfall and influent levels are at normal base flows.

After the permittee has collected a wet weather sample and a dry weather sample, the permittee may request from DEQ a waiver for the second wet weather sample. Documentation shall be submitted with the request to demonstrate why another wet weather sample is not necessary for the TMDL implementation. DEQ shall review the documentation and notify the permittee in writing on the final waiver decision.

- c. Each effluent sample shall consist of a minimum 2 liter volume and be collected using either 24 hour manual or automated compositing methods. The sampling protocol shall be submitted to DEQ-NRO for review and approval prior to the first sample collection.
- d. The data shall be submitted to DEQ -NRO by the 10th day of the month following receipt of the results. The permittee shall have the option of submitting the results electronically. The submittal shall include the unadjusted and appropriately qualified individual PCB congener analytical results. Additionally, laboratory and field QA/QC documentation and results shall be reported. Total PCBs are to be computed as the summation of the reported, quantified congeners.
- e. If the results of this monitoring indicate actual or potential exceedances of the water quality criterion or actual exceedance of the Waste Load Allocation specified in the approved TMDL, and upon notification by DEQ-NRO, the permittee shall submit for review and approval a Pollutant Minimization Plan (PMP) designed to locate and reduce sources of PCBs in the collection system. A component of the plan may include an evaluation of the PCB congener distribution in the initial source intake water to determine the net contributions of PCBs introduced to the treatment works.

12. Application for Reclamation and Reuse and Reclaimed Water Management Plan In accordance with the Water Reclamation and Reuse Regulation, the permittee shall submit to D.

In accordance with the Water Reclamation and Reuse Regulation, the permittee shall submit to DEQ -NRO for approval, a detailed application at least 90 days prior to commencing reuse.

13. Total Maximum Daily Load (TMDL) Reopener

This permit shall be modified or alternatively revoked and reissued if any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements.

CONDITIONS APPLICABLE TO ALL VPDES PERMITS

A. Monitoring

- 1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.
- 2. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
- 3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.

B. Records

- 1. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The individual(s) who performed the sampling or measurements;
 - c. The date(s) and time(s) analyses were performed;
 - d. The individual(s) who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
- 2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

C. Reporting Monitoring Results.

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

Department of Environmental Quality - Northern Regional Office (DEQ-NRO) 13901 Crown Court Woodbridge, VA 22193

Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the Department.

- 2. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under Title 40 of the Code of Federal Regulations Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the Department.
- 3. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information.

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from this discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports.

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges.

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

- 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
- 2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges.

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II.F.; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II.F., shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

- 1. A description of the nature and location of the discharge;
- 2. The cause of the discharge;
- 3. The date on which the discharge occurred;
- 4. The length of time that the discharge continued;
- 5. The volume of the discharge;
- 6. If the discharge is continuing, how long it is expected to continue;
- 7. If the discharge is continuing, what the expected total volume of the discharge will be; and
- 8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges.

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II.I.2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

- 1. Unusual spillage of materials resulting directly or indirectly from processing operations;
- 2. Breakdown of processing or accessory equipment;
- 3. Failure or taking out of service some or all of the treatment works; and
- 4. Flooding or other acts of nature.

I. Reports of Noncompliance.

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

- 1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
 - a. Any unanticipated bypass; and
 - b. Any upset which causes a discharge to surface waters.
- 2. A written report shall be submitted within 5 days and shall contain:
 - a. A description of the noncompliance and its cause;
 - b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and
 - c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II.I. if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II, I.1.or I.2., in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II.I.2.

NOTE: The immediate (within 24 hours) reports required in Parts II, G., H. and I. may be made to the Department's Northern Regional Office at (703) 583-3800 (voice) or (703) 583-3821 (fax). For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24-hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes.

- 1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
 - 1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or
 - 2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;
 - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
 - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- 2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements.

- 1. All permit applications shall be signed as follows:
 - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or
 - 2) The manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes:
 - 1) The chief executive officer of the agency, or
 - 2) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- 2. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II.K.1., or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Part II.K.1.;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
 - c. The written authorization is submitted to the Department.
- 3. Changes to authorization. If an authorization under Part II.K.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II.K.2. shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.
- 4. Certification. Any person signing a document under Parts II, K.1. or K.2. shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply.

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to Reapply.

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a Permit.

This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State Law.

Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II.U.), and "upset" (Part II.V.) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

P. Oil and Hazardous Substance Liability.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

Q. Proper Operation and Maintenance.

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of solids or sludges.

Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to Mitigate.

The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense.

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass.

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Parts II, U.2. and U.3.

2. Notice

- a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
- b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II.I.

3. Prohibition of bypass.

- a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
 - 1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - 2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - 3) The permittee submitted notices as required under Part II.U.2.
- b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II.U.3.a.

V. Upset.

- 1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II.V.2. are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
- 2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
 - b. The permitted facility was at the time being properly operated;
 - c. The permittee submitted notice of the upset as required in Part II.I.; and
 - d. The permittee complied with any remedial measures required under Part II.S.
- 3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry.

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

- 1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- 4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions.

Permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permits.

- 1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II.Y.2., a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued, or a min or modification made, to identify the new permittee and incorporate such other requirements as may be necessary under the State Water Control Law and the Clean Water Act.
- 2. As an alternative to transfers under Part II.Y.1., this permit may be automatically transferred to a new permittee if:
 - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
 - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
 - c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II.Y.2.b.

Z. Severability.

The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.